

Docket JP920000176US1

Appl. No.: 09/626,945

Filed: 07/27/2000

IN THE CLAIMS

1. (canceled)

2. (canceled)

3. (currently amended) A computing system comprising a central processing unit, associated memory, input/output devices and containing an e-mail system, characterized in that the computer system includes a remote control device comprising:

- means to convert speech to text;
- means to transmit the text to the e-mail system;
- means to receive text from the e-mail system;
- means to convert the received text into speech; and
- means to select and access the received e-mail in the e-mail system.

wherein said remote control device (RCD) further includes means to display the received email messages, and

A computing system as claimed in claim 1 wherein the remote control device is customized by a the user to speak aloud the sender, date, subject, e-mail content and attachment for incoming mail.

4. (currently amended) A computing system as claimed in claim 3 wherein the remote control device includes means for selecting an email message or folder.

5. (currently amended) A computing system comprising a central processing unit, associated memory, input/output devices and containing an e-mail system, characterized in that it includes a remote control device comprising:

- means to convert speech to text;
- means to transmit the text to the e-mail system;
- means to receive text from the e-mail system;
- means to convert the received text into speech; and
- means to select and access the received e-mail in the e-mail system.

Docket JP920000176US1

Appl. No.: 09/626,945

Filed: 07/27/2000

~~wherein the remote control device includes means for selecting email message or folder.~~

~~A computing system as claimed in claim 1 wherein the remote control device includes means for speaking aloud a thesummary of an e-mail folder.~~

6. (currently amended) A computing system as claimed in claim 3 ~~4~~ wherein the remote control device is linked to the computer through infra-red or ultrasonic or radio frequency waves.

7. (currently amended) ~~A computing system comprising a central processing unit, associated memory, input/output devices and containing an e-mail system, characterized in that it includes a remote control device comprising:~~

- ~~- means to convert speech to text;~~
- ~~- means to transmit the text to the e-mail system;~~
- ~~- means to receive text from the e-mail system;~~
- ~~- means to convert the received text into speech; and~~
- ~~- means to select and access the received e-mail in the e-mail system,~~

~~wherein the remote control device is linked to the computer through infra-red or ultrasonic or radio frequency waves.~~

~~A computing system as claimed in claim 1 wherein the e-mail system provides a audio announcement whenever new messages are received.~~

8. (currently amended) A computing system comprising a central processing unit, associated memory, input/output devices, an e-mail system and a remote control device, wherein the remote control device comprises:

- a microphone connected to an input of a microphone amplifier,
- an output of said microphone connected to an input of an analog to digital converter (ADC),
- an output of the ADC connected to ~~the one~~ input of a processor ~~means~~,
- a second input of said processor connected to a ROM (Read Only Memory) containing text-to-speech conversion software and speech-to text-conversion software,

Docket JP920000176US1

Appl. No.: 09/626,945

Filed: 07/27/2000

- a first input-output of said processor ~~means~~ connected to Random Access Memory (RAM) which contains speech-to-text data, text-to-speech-data, and command and status data,
  - one output of said processor ~~means~~ connected to a transmitter for transmitting the data in RAM to the e-mail system,
  - another input of the processor ~~means~~ connected to a receiver, wherein the receiver ~~which~~ receives data from the e-mail system,
  - another input/output of the processor ~~means~~ connected to a control panel containing switches and display elements, and
  - another output of the processor ~~means~~ connected to a digital to analogue convertor, wherein the digital to analogue converter ~~which~~ converts data received from the text-to-speech conversion software into an analogue electrical signal, the analogue electrical signal being fed to an input of an audio amplifier which drives a loud speaker to generate audible sound.
9. (currently amended) A computing system as claimed in claim 8 wherein the processor ~~means~~ is a digital signal processor.
10. (currently amended) A computing system as claimed in claim 8 wherein the processor ~~means~~ is a micro controller.
11. (currently amended) A computing system as claimed in claim 8 wherein the processor ~~means~~ is an ASIC.
12. (previously presented) A computing system as claimed in claim 11 wherein the ASIC includes the entire circuit except the microphone, speaker, computer containing e-mail system and control panel.
13. (previously presented) A computing system as claimed in claim 11 wherein the ASIC contains ROM, RAM, transmitter and receiver.
14. (currently amended) A computer programme product residing on computer storage media, the computer programme product comprising:

Docket JP920000176US1

Appl. No.: 09/626,945  
Filed: 07/27/2000

instructions for sending e-mail by:

receiving speech input by a remote control device from a user,  
converting the speech input by the remote control device into an analog electrical signal,  
amplifying the electrical signal and converting the electrical signal to digital form by the remote control device,  
converting the digitized signal to text by the remote control device, and  
transmitting the text by the remote control device to an e-mail system of a computing system, instructions for receiving e-mail by:  
transmission of data to the remote control device,  
receiving data from the computing system's e-mail system by the remote control device,  
converting said received data from text to digitized speech by the remote control device,  
converting the digitized speech to analog form by the remote control device, and  
amplifying the analog signal and converting the analog signal to speech by the remote control device for the user.

15. (canceled)

16. (previously presented) In a computing system comprising a central processing unit, associated memory, input/output devices and an e-mail system, a method for remotely controlling the e-mail system using a remote control device, the method comprising the steps of:  
sending e-mail by:

receiving speech input by the remote control device from a user,  
converting the speech input by the remote control device into an analog electrical signal,  
amplifying the electrical signal and converting the electrical signal to digital form by the remote control device,  
converting the digitized signal to text by the remote control device,

Docket JP920000176US1

Appl. No.: 09/626,945

Filed: 07/27/2000

- transmitting the text by the remote control device to the computing system's e-mail system, and

- receiving the transmitted text in the computing system's e-mail system,

and,

receiving e-mail by:

- transmission of data from the computing system's e-mail system to the remote control device,

- receiving transmitted data at the remote control device,

- converting said received data from text to digitized speech by the remote control device,

- converting the digitized speech to analog form by the remote control device, and

- amplifying the analog signal and converting the analog signal to speech by the remote control device for the user.

17. (previously presented) A method as claimed in claim 16 wherein the email is selected through speech or through a control panel.
18. (previously presented) A method as claimed in claim 16 wherein the received mail message is displayed on the remote control device.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**